

Amendments to the Specification

Please replace the paragraph beginning at page 1, line 5, with the following rewritten paragraph:

--The present invention relates to conductive greases, and more particularly to conductive greases for reducing electrostatic discharge machining in bearing assemblies of motors, particularly, electric motors--

Please replace the paragraph beginning on page 17, line 10, with the following rewritten paragraph:

--EXAMPLE 1

50.0 grams of Nyogel 753G was obtained from Nye Lubricants of Fairhaven, Massachusetts. Using a blender at ambient conditions, 0.9 grams of carbon black coated with polyaniline was mixed with the Nyogel 753G. The coated carbon black comprised about 1.8 wt % of the final grease. The conductive grease was employed in an induction motor, particularly, an A.O. Smith 7.5HP E+3 induction motor. The grease at least partially encompassed the bearings. The conductive grease was able to pass a 10,000 hour test in the motor. To determine whether the grease "passed" the test, the following was measured: voltage on the shaft of the motor, and sound level produced by the bearings (sound was measured 1 foot axially off the end of the motor shaft). More particularly, the conductive grease "passed" the test, if the voltage on the shaft of the motor in which the grease was used exhibited less than 10 volts throughout the test. Moreover, the sound levels in motors in which passing greases were employed did not increase more than 6 decibels throughout the test. After completion of the test, the motors were disassembled, the bearings cut apart, and the races examined under an electron microscope for electrostatic discharge machining as well.--

Please replace the paragraph beginning on page 19, line 1, with the following rewritten paragraph:

--The voltage waveform observed on the rotor while running was a very complex square wave with some amplitude modulation. To describe this waveform, the amplitude of most of the peaks (normal voltage) and of the biggest peaks (peak voltage) was recorded. The peak rotor voltage only occurred 1 or 2% of the time.

Motor	Elapsed Hours	normal voltage	peak voltage	sound level
mineral oil	1596	15	25	<u>not recorded</u> [NA]
conductive grease	413	3	7	<u>not recorded</u> [NA]
mineral oil	2739	15	25	<u>not recorded</u>
conductive grease	2388	4.5	8.5	68dB
mineral oil	4784	15	25	<u>not recorded</u> [NA]
conductive grease	5047	4	7.5	74dB
mineral oil	7460	2.5	7.5	<u>not recorded</u> [NA]
conductive grease	7181	4	7.5	75dB
mineral oil	10000	15	30	74dB
conductive grease	10000	4	12	75dB--